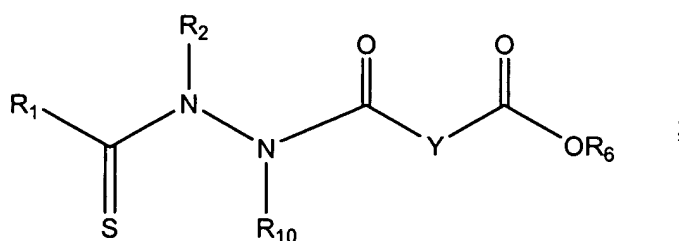


## CLAIMS

What is claimed is:

1. A compound represented by the structural formula:



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or a pharmaceutically acceptable salt thereof, wherein R<sub>1</sub> and R<sub>2</sub> are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group,

R<sub>10</sub> is -H or unsubstituted alkyl group;

10 R<sub>6</sub> is a carboxylic acid protecting group; and

Y is a covalent bond or a substituted or unsubstituted straight-chained hydrocarbyl group.

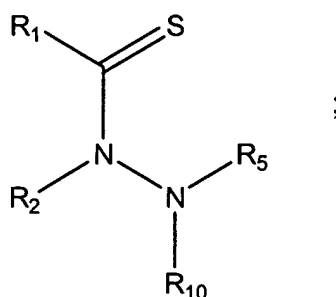
2. The compound of Claim 1 wherein Y is a covalent bond or -C(R<sub>7</sub>R<sub>8</sub>)- and R<sub>7</sub> and R<sub>8</sub> are each independently -H, an aliphatic or substituted aliphatic group, or R<sub>7</sub> is -H and R<sub>8</sub> is a substituted or unsubstituted aryl group, or, R<sub>7</sub> and R<sub>8</sub>, taken together, are a C<sub>2</sub>-C<sub>6</sub> substituted or unsubstituted alkylene group.

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3. The compound of Claim 2 wherein R<sub>7</sub> and R<sub>8</sub> are both -H.

4. The compound of Claim 1 wherein  $R_1$  is an aryl group or a substituted aryl group.
5. The compound of Claim 1 wherein  $R_2$  is an alkyl group or a substituted lower alkyl group.
- 5 6. The compound of Claim 2 wherein  $R_2$  is methyl or ethyl;  $R_7$  is -H; and  $R_8$  is -H or methyl.
7. The compound of Claim 6 wherein  $R_1$  is phenyl or substituted phenyl.
8. The compound of Claim 7 wherein  $R_1$  is phenyl and  $R_2$  is methyl.
9. The compound of Claim 2 wherein  $R_1$  is an aliphatic group or a substituted aliphatic group.
- 10 10. The compound of Claim 2 wherein  $R_2$  is an aliphatic group or a substituted aliphatic group.
11. The compound of Claim 10 wherein  $R_2$  is a lower alkyl group or a substituted lower alkyl group.
12. The compound of Claim 1 wherein  $R_{10}$  is H.
- 15 13. The compound of Claim 2 wherein  $R_{10}$  is H.

14. A compound represented by the structural formula:



- 5 or a pharmaceutically acceptable salt thereof, wherein  $\text{R}_1$  and  $\text{R}_2$  are independently an aliphatic group, a substituted aliphatic group, an aryl group or a substituted aryl group;  $\text{R}_5$  is -H or a hydrazine protecting group and  $\text{R}_{10}$  is -H or a substituted or unsubstituted alkyl group.
15. The compound of Claim 14 wherein  $\text{R}_5$  is a hydrazine protecting group when  $\text{R}_2$  is an aryl group or a substituted aryl group.
- 10 16. The compound of Claim 14 wherein  $\text{R}_5$  is -H or a hydrazine protecting group when  $\text{R}_2$  is an aliphatic or substituted aliphatic group and  $\text{R}_{10}$  is -H or an unsubstituted alkyl group.
17. The compound of Claim 14 wherein  $\text{R}_2$  is an aliphatic group or a substituted aliphatic group.

18. The compound of Claim 17 wherein  $R_1$  is an aryl group or a substituted aryl group.
19. The compound of Claim 18 wherein  $R_2$  is an alkyl group or a substituted lower alkyl group.
- 5 20. The compound of Claim 19 wherein  $R_2$  is methyl or ethyl.
21. The compound of Claim 14 wherein  $R_1$  is phenyl or substituted phenyl.
22. The compound of Claim 21 wherein  $R_1$  is phenyl and  $R_2$  is methyl.
23. The compound of Claim 21 wherein  $R_1$  is phenyl substituted with one or more groups selected from -OH, -Br, -Cl, -I, -F, -OR<sup>a</sup>, -O-COR<sup>a</sup>, -COR<sup>a</sup>, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR<sup>a</sup>, -N(R<sup>a</sup>R<sup>b</sup>), -COOR<sup>a</sup>, -CHO, -CONH<sub>2</sub>, -CONHR<sup>a</sup>, -CON(R<sup>a</sup>R<sup>b</sup>), -NHCOR<sup>a</sup>, -NRCOR<sup>a</sup>, -NHCONH<sub>2</sub>, -NHCONR<sup>a</sup>H, -NHCON(R<sup>a</sup>R<sup>b</sup>), -NR<sup>c</sup>CONH<sub>2</sub>, -NR<sup>c</sup>CONR<sup>a</sup>H, -NR<sup>c</sup>CON(R<sup>a</sup>R<sup>b</sup>), -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR<sup>a</sup>, -C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -C(=NR<sup>c</sup>)-NH<sub>2</sub>, -C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NH-C(=NH)-NH<sub>2</sub>, -NH-C(=NH)-NHR<sup>a</sup>, -NH-C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -NH-C(=NR<sup>c</sup>)-NH<sub>2</sub>, -NH-C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -NH-C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NR<sup>d</sup>H-C(=NH)-NH<sub>2</sub>, -NR<sup>d</sup>-C(=NH)-NHR<sup>a</sup>, -NR<sup>d</sup>-C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -NR<sup>d</sup>-C(=NR<sup>c</sup>)-NH<sub>2</sub>, -NR<sup>d</sup>-C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -NR<sup>d</sup>-C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NHNH<sub>2</sub>, -NHNHR<sup>a</sup>, -NHN(R<sup>a</sup>R<sup>b</sup>), -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR<sup>a</sup>, -SO<sub>2</sub>NR<sup>a</sup>R<sup>b</sup>, -CH=CHR<sup>a</sup>, -CH=CR<sup>a</sup>R<sup>b</sup>, -CR<sup>c</sup>=CR<sup>a</sup>R<sup>b</sup>, -CR<sup>c</sup>=CHR<sup>a</sup>, -CR<sup>c</sup>=CR<sup>a</sup>R<sup>b</sup>, -CCR<sup>a</sup>, -SH, -SR<sup>a</sup>, -S(O)R<sup>a</sup>, -S(O)<sub>2</sub>R<sup>a</sup>, alkyl groups, substituted alkyl group, non-aromatic heterocyclic group, substituted non-aromatic heterocyclic group, benzyl group, substituted benzyl group, aryl group or substituted aryl group wherein R<sup>a</sup>-R<sup>d</sup> each independently an alkyl group, substituted alkyl group, benzyl, substituted benzyl, aromatic or substituted aromatic group, or, -N(R<sup>a</sup>R<sup>b</sup>), taken together, can also form a substituted or unsubstituted non-aromatic heterocyclic group.

24. The compound of Claim 23, wherein  $R_2$  is methyl.
25. The compound of Claim 14 wherein  $R_1$  is a lower alkyl group and  $R_2$  is a phenyl group substituted with one or more groups selected from -OH, -Br, -Cl, -I, -F, -OR<sup>a</sup>, -O-COR<sup>a</sup>, -COR<sup>a</sup>, -CN, -NO<sub>2</sub>, -COOH, -SO<sub>3</sub>H, -NH<sub>2</sub>, -NHR<sup>a</sup>, -N(R<sup>a</sup>R<sup>b</sup>), -COOR<sup>a</sup>,  
5 -CHO, -CONH<sub>2</sub>, -CONHR<sup>a</sup>, -CON(R<sup>a</sup>R<sup>b</sup>), -NHCOR<sup>a</sup>, -NRCOR<sup>a</sup>, -NHCONH<sub>2</sub>, -NHCONR<sup>a</sup>H, -NHCON(R<sup>a</sup>R<sup>b</sup>), -NR<sup>c</sup>CONH<sub>2</sub>, -NR<sup>c</sup>CONR<sup>a</sup>H, -NR<sup>c</sup>CON(R<sup>a</sup>R<sup>b</sup>), -C(=NH)-NH<sub>2</sub>, -C(=NH)-NHR<sup>a</sup>, -C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -C(=NR<sup>c</sup>)-NH<sub>2</sub>, -C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NH-C(=NH)-NH<sub>2</sub>, -NH-C(=NH)-NHR<sup>a</sup>, -NH-C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -NH-C(=NR<sup>c</sup>)-NH<sub>2</sub>, -NH-C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -NH-C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NR<sup>d</sup>H-C(=NH)  
10 -NH<sub>2</sub>, -NR<sup>d</sup>-C(=NH)-NHR<sup>a</sup>, -NR<sup>d</sup>-C(=NH)-N(R<sup>a</sup>R<sup>b</sup>), -NR<sup>d</sup>-C(=NR<sup>c</sup>)-NH<sub>2</sub>, -NR<sup>d</sup>-C(=NR<sup>c</sup>)-NHR<sup>a</sup>, -NR<sup>d</sup>-C(=NR<sup>c</sup>)-N(R<sup>a</sup>R<sup>b</sup>), -NHNH<sub>2</sub>, -NHNHR<sup>a</sup>, -NHN(R<sup>a</sup>R<sup>b</sup>), -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHR<sup>a</sup>, -SO<sub>2</sub>NR<sup>a</sup>R<sup>b</sup>, -CH=CHR<sup>a</sup>, -CH=CR<sup>a</sup>R<sup>b</sup>, -CR<sup>c</sup>=CR<sup>a</sup>R<sup>b</sup>, -CR<sup>c</sup>=CHR<sup>a</sup>, -CR<sup>c</sup>=CR<sup>a</sup>R<sup>b</sup>, -CCR<sup>a</sup>, -SH, -SR<sup>a</sup>, -S(O)R<sup>a</sup>, -S(O)<sub>2</sub>R<sup>a</sup>, alkyl groups, substituted alkyl group, non-aromatic heterocyclic group, substituted non-aromatic heterocyclic group, benzyl group, substituted benzyl group, aryl group or substituted aryl group wherein R<sup>a</sup>-R<sup>d</sup> each are independently an alkyl group, substituted alkyl group, benzyl, substituted benzyl, aromatic or substituted aromatic group, or, -N(R<sup>a</sup>R<sup>b</sup>), taken together, can also form a substituted or unsubstituted non-aromatic heterocyclic group.